**Weather chapter 3 test bank**

**Multiple Choice**

*Identify the letter of the choice that best completes the statement or answers the question.*

\_\_\_\_ 1. The tilt of Earth as it orbits around the sun causes

|  |  |  |  |
| --- | --- | --- | --- |
| a. | global warming | c. | a rain shadow. |
| b. | different seasons. | d. | the greenhouse effect. |

\_\_\_\_ 2. What factor affects the prevailing winds as they blow across a continent, producing different climates?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | latitude | c. | forests |
| b. | mountains | d. | glaciers. |

\_\_\_\_ 3. What factor determines the amount of solar energy an area receives?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | latitude | c. | mountains |
| b. | wind patterns | d. | ocean currents |

\_\_\_\_ 4. What climate zone has the coldest average temperature?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tropical | c. | temperate |
| b. | polar | d. | tundra |

\_\_\_\_ 5. What biome is not located in the tropical zone?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | rain forest | c. | chaparral |
| b. | savanna | d. | desert |

\_\_\_\_ 6. What biome contains the greatest number of plant and animal species?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | rain forest | c. | grassland |
| b. | temperate forest | d. | tundra |

\_\_\_\_ 7. Which of the following is NOT a theory for the cause of ice ages?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | the Milankovich theory | c. | plate tectonics |
| b. | volcanic eruptions | d. | the greenhouse effect |

\_\_\_\_ 8. Which of the following is thought to contribute to global warming?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | wind patterns | c. | ocean surface currents |
| b. | deforestation | d. | microclimates |

\_\_\_\_ 9. Wind will generally carry the most moisture when it comes from

|  |  |  |  |
| --- | --- | --- | --- |
| a. | warm grasslands. | c. | polar icecaps. |
| b. | warm tropical seas. | d. | mountainous regions. |

\_\_\_\_ 10. Which of these gets about as much precipitation as a tropical desert?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | taiga | c. | tropical rain forest |
| b. | tundra | d. | chaparral |

\_\_\_\_ 11. Which human activity is thought to be most responsible for global warming?

|  |  |
| --- | --- |
| a. | using aerosol hairspray |
| b. | mowing grasslands for cattle feed |
| c. | burning fossil fuels for transportation |
| d. | planting deciduous forests for building materials |

\_\_\_\_ 12. Seasons are caused by

|  |  |  |  |
| --- | --- | --- | --- |
| a. | the gravitational pull of the moon. | c. | sunspots. |
| b. | centripetal force. | d. | the tilt of the Earth's axis. |

\_\_\_\_ 13. The equator has a latitude of

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 0º. | c. | 90º. |
| b. | 45º. | d. | 180º. |

\_\_\_\_ 14. The North Pole has a latitude of

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 0º. | c. | 90º. |
| b. | 45º. | d. | 180º. |

\_\_\_\_ 15. At a latitude of 90º, the sun's rays strike the surface of the Earth at a

|  |  |
| --- | --- |
| a. | 90º angle spreading the amount of solar energy over a large area. |
| b. | 90º angle concentrating the amount of solar energy onto a small area. |
| c. | lesser angle concentrating the amount of solar energy onto a small area. |
| d. | lesser angle spreading the amount of solar energy over a large area. |

\_\_\_\_ 16. At the equator, the sun's rays strike the surface of the Earth at a

|  |  |
| --- | --- |
| a. | 90º angle spreading the amount of solar energy over a large area. |
| b. | 90º angle concentrating the amount of solar energy onto a small area. |
| c. | lesser angle concentrating the amount of solar energy onto a small area. |
| d. | lesser angle spreading the amount of solar energy over a large area. |

\_\_\_\_ 17. The polar regions receive almost 24 hours of darkness in the

|  |  |  |  |
| --- | --- | --- | --- |
| a. | summer. | c. | fall. |
| b. | winter. | d. | spring. |

\_\_\_\_ 18. The polar regions receive almost 24 hours of daylight in the

|  |  |  |  |
| --- | --- | --- | --- |
| a. | summer. | c. | fall. |
| b. | spring. | d. | winter. |

\_\_\_\_ 19. During our winter months, the Southern Hemisphere has

|  |  |  |  |
| --- | --- | --- | --- |
| a. | lower temperatures and shorter days. | c. | higher temperatures and longer days. |
| b. | lower temperatures and longer days. | d. | higher temperatures and shorter days. |

\_\_\_\_ 20. Because warm air is

|  |  |  |  |
| --- | --- | --- | --- |
| a. | less dense, it tends to rise. | c. | more dense, it tends to rise. |
| b. | less dense, it tends to sink. | d. | more dense, it tends to sink. |

\_\_\_\_ 21. If prevailing winds form from cold air, they will probably

|  |  |  |  |
| --- | --- | --- | --- |
| a. | be dry. | c. | produce sleet. |
| b. | produce rain. | d. | produce snow. |

\_\_\_\_ 22. Even though Mt. Kilimanjaro is only about 3º south of the equator, it is snow-covered year-round. This is because of

|  |  |  |  |
| --- | --- | --- | --- |
| a. | its latitude. | c. | its elevation. |
| b. | surface currents. | d. | wind patterns. |

\_\_\_\_ 23. As elevation increases, atmosphere becomes

|  |  |
| --- | --- |
| a. | more dense and temperature decreases. |
| b. | less dense and temperature decreases. |
| c. | less dense and temperature increases. |
| d. | more dense and temperature increases. |

\_\_\_\_ 24. If a prevailing wind blows from an ocean in the west across a mountain in the east, the land on the windward side of the mountain

|  |  |
| --- | --- |
| a. | and the land on the other side will be dry. |
| b. | and the land on the other side will be green and lush. |
| c. | will be dry and the land on the other side will be green and lush. |
| d. | will be green and lush and the land on the other side will be dry. |

\_\_\_\_ 25. If one side of a mountain resembles a dry desert, we call this a

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tundra. | c. | rain shadow. |
| b. | taiga. | d. | polar zone. |

\_\_\_\_ 26. Iceland and Greenland are both countries just below the Arctic Circle. Why does Iceland have a warmer climate than Greenland?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | elevation | c. | latitude |
| b. | surface currents | d. | precipitation |

Examine the diagram of an ocean current and answer the question that follows.



\_\_\_\_ 27. What is the name of the current in the illustration above?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Labrador Current | c. | Gulf Stream |
| b. | North Atlantic Drift | d. | North Equatorial Current |

\_\_\_\_ 28. Which of the following is NOT true?

|  |  |
| --- | --- |
| a. | The Gulf Stream is a warm current. |
| b. | Continental land masses act as barriers to surface currents. |
| c. | Continental land masses act as barriers to prevailing winds. |
| d. | The surface temperature of water affects the temperature of the air above it. |

Examine the map below and answer the question that follows.



\_\_\_\_ 29. Which statement does NOT correctly describe surface currents?

|  |  |
| --- | --- |
| a. | Surface currents along the Antarctic move eastward. |
| b. | Surface currents are so short that they do not affect global climates. |
| c. | Surface currents in the Southern Hemisphere move counterclockwise. |
| d. | Surface currents in the Northern Hemisphere move clockwise. |

\_\_\_\_ 30. Which of the following is a biome of a major climate zone?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tundra | c. | polar |
| b. | tropical | d. | temperate |

\_\_\_\_ 31. Which of the following is NOT a major climate zone?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | polar | c. | antarctic |
| b. | tropical | d. | temperate |

Below is an illustration in which the Earth has been divided into the major climate zones. Examine the illustration and answer the questions that follow.



\_\_\_\_ 32. Which of the following is a climate zone at **3**?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | polar | c. | antarctic |
| b. | tropical | d. | temperate |

\_\_\_\_ 33. Which of the following is a climate zone at **1**?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | polar | c. | antarctic |
| b. | tropical | d. | temperate |

\_\_\_\_ 34. Which of the following is a climate zone at **4**?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | polar | c. | antarctic |
| b. | tropical | d. | temperate |

\_\_\_\_ 35. Climate zones are determined by

|  |  |  |  |
| --- | --- | --- | --- |
| a. | geography. | c. | temperature ranges. |
| b. | precipitation amounts. | d. | Both (a) and (b) |

\_\_\_\_ 36. Biomes are determined by

|  |  |  |  |
| --- | --- | --- | --- |
| a. | geography. | c. | temperature ranges. |
| b. | precipitation amounts. | d. | All of the above |

\_\_\_\_ 37. Which biome is NOT in the temperate zone?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | taiga | c. | forest |
| b. | desert | d. | chaparral |

\_\_\_\_ 38. Which biome is in the polar zone?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | forest | c. | chaparral |
| b. | tundra | d. | grasslands |

\_\_\_\_ 39. Which of the following is a succulent plant?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | cactus | c. | herb |
| b. | fern | d. | thorny shrub |

\_\_\_\_ 40. The seeds of some savanna plants require \_\_\_\_ to grow.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | no water | c. | fire |
| b. | fertilizer | d. | darkness |

\_\_\_\_ 41. In which biome would you expect to find a kangaroo rat?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tundra | c. | chaparral |
| b. | taiga | d. | tropical desert |

\_\_\_\_ 42. Prairies, steppes, and pampas are all local names of

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tropical savannas. | c. | tundras. |
| b. | temperate grasslands. | d. | tropical deserts. |

\_\_\_\_ 43. Most of the \_\_\_\_ have been plowed to make room for croplands.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | chaparrals | c. | tropical savannas |
| b. | temperate grasslands | d. | temperate forests |

\_\_\_\_ 44. Which biome tends to be very hot in the daytime and very cold at night?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tundra | c. | tropical rain forest |
| b. | tropical desert | d. | temperate desert |

\_\_\_\_ 45. The \_\_\_\_ is the biome that provides most of the wood for paper.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tundra | c. | taiga |
| b. | tropical rain forest | d. | chaparral |

\_\_\_\_ 46. A large city that is 2ºC warmer than the surrounding rural areas is an example of a

|  |  |  |  |
| --- | --- | --- | --- |
| a. | climate zone. | c. | biome. |
| b. | microclimate. | d. | tropical zone. |

\_\_\_\_ 47. Which biome has the most fertile soil?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tropical rain forest | c. | tundra |
| b. | tropical savanna | d. | temperate grassland |

\_\_\_\_ 48. In which biome would you most likely find monkeys, lemurs, and jaguars?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tropical rain forest | c. | chaparral |
| b. | tropical savanna | d. | temperate forest |

\_\_\_\_ 49. During a glacial period, large amounts of ocean water

|  |  |  |  |
| --- | --- | --- | --- |
| a. | freeze and the sea levels drop. | c. | melt and the sea levels drop. |
| b. | freeze and the sea levels rise. | d. | melt and the sea levels rise. |

\_\_\_\_ 50. During an interglacial period, large amounts of ocean water

|  |  |  |  |
| --- | --- | --- | --- |
| a. | freeze and the sea levels drop. | c. | melt and the sea levels drop. |
| b. | freeze and the sea levels rise. | d. | melt and the sea levels rise. |

\_\_\_\_ 51. Milutin Milankovitch, a Yugoslavian scientist, suggested that over a period of 100,000 years the shape of Earth's orbit changes. This would cause

|  |  |
| --- | --- |
| a. | hotter summers and colder winters when the orbit is circular. |
| b. | hotter summers and colder winters when the orbit is elliptical. |
| c. | cooler summers and warmer winters when the orbit is elliptical. |
| d. | hotter summers and colder winters when the orbit is circular. |

\_\_\_\_ 52. Milutin Milankovitch suggested that the tilt of the Earth varies between 21.8º and 24.4º. When the tilt is at

|  |  |
| --- | --- |
| a. | 24.4º, the poles receive more solar energy. |
| b. | 24.4º, the poles receive less solar energy. |
| c. | 21.8º, the poles receive more solar energy. |
| d. | Both (a) and (c) |

\_\_\_\_ 53. How do volcanic eruptions, specifically the worldwide spread of volcanic ash during an eruption, affect global climate?

|  |  |
| --- | --- |
| a. | Volcanic ash absorbs the sun's rays, causing cooler temperatures. |
| b. | Volcanic ash intensifies the sun's rays like a magnifying glass, warming the Earth. |
| c. | Volcanic ash reflects the sun's rays, causing cooler temperatures. |
| d. | Volcanic ash affects only the local climate by destroying everything. |

\_\_\_\_ 54. Evidence suggests that one reason Earth's climate has changed might be because all continents were once

|  |  |
| --- | --- |
| a. | near the South Pole. |
| b. | near the North Pole. |
| c. | near the equator. |
| d. | split into two groups, one at each pole. |

\_\_\_\_ 55. One theory suggests that all of the continents were once a giant landmass called

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Pangaea. | c. | Laurasia. |
| b. | Panthalassa. | d. | Gondwana. |

\_\_\_\_ 56. Which gas is thought to contribute to global warming?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | nitrogen | c. | oxygen |
| b. | carbon monoxide | d. | carbon dioxide |

\_\_\_\_ 57. One likely consequence of global warming would be

|  |  |  |  |
| --- | --- | --- | --- |
| a. | earthquakes. | c. | flooding. |
| b. | volcanic eruptions. | d. | tornadoes. |

\_\_\_\_ 58. Where would the weather most likely be warm on December 25th?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Alaska | c. | England |
| b. | Australia | d. | Canada |

\_\_\_\_ 59. In Africa, the Sahara desert is near the west coast of the continent. Why, when it is so near to the ocean, does it NOT receive much precipitation?

|  |  |
| --- | --- |
| a. | Surface currents cause it to be too hot. |
| b. | Prevailing winds flow from west to east. |
| c. | Prevailing winds flow from east to west. |
| d. | Its elevation is too high above sea level. |

\_\_\_\_ 60. As air is forced up over a mountain, it

|  |  |  |  |
| --- | --- | --- | --- |
| a. | cools and releases moisture. | c. | warms and releases moisture. |
| b. | cools and absorbs moisture. | d. | warms and absorbs moisture. |

\_\_\_\_ 61. After air crosses a mountain, it sinks and

|  |  |  |  |
| --- | --- | --- | --- |
| a. | cools, releasing moisture. | c. | warms, releasing moisture. |
| b. | cools, absorbing moisture. | d. | warms, absorbing moisture. |

\_\_\_\_ 62. People who live in coastal communities know that within a few blocks of the ocean the temperature can be cooler than further inland. This is because of

|  |  |  |  |
| --- | --- | --- | --- |
| a. | altitude. | c. | elevation. |
| b. | surface currents. | d. | latitude. |

\_\_\_\_ 63. In which biome would you most likely find giraffes?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | temperate grasslands | c. | tundras |
| b. | tropical savannas | d. | tropical deserts |

\_\_\_\_ 64. In which climate zone is most of Africa located?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tropical | c. | polar |
| b. | temperate | d. | antarctic |

\_\_\_\_ 65. In which climate zone is most of North America located?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tropical | c. | polar |
| b. | temperate | d. | antarctic |

\_\_\_\_ 66. Which biome makes up most of Africa?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | tropical desert | c. | chaparral |
| b. | tropical rain forest | d. | tropical savanna |

\_\_\_\_ 67. Which biome makes up most of Canada?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | taiga | c. | chaparral |
| b. | tundra | d. | temperate forest |

\_\_\_\_ 68. The world's grasslands once covered about 42 percent of Earth's total land surface. Today, they occupy only about 12 percent. What percentage of Earth's grasslands do we have left?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 12 percent | c. | 42 percent |
| b. | 29 percent | d. | 54 percent |

\_\_\_\_ 69. The Great Basin Desert is in a \_\_\_\_ of the Sierra Nevada.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | microclimate | c. | rain shadow |
| b. | polar zone | d. | tropical zone |

\_\_\_\_ 70. Plants are important to the atmosphere of Earth because they use \_\_\_\_ to make food.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | nitrogen | c. | oxygen |
| b. | carbon monoxide | d. | carbon dioxide |

**Completion**

*Complete each sentence or statement.*

 71. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the condition of the atmosphere in a certain area over a long period of time. (Weather or Climate)

 72. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the distance north and south from the equator measured in degrees. (Longitude or Latitude)

 73. Savannas are grasslands located in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ zone between 23.5º north latitude and 23.5º south latitude. (temperate or tropical)

 74. Trees that lose their leaves are found in a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ forest. (deciduous or evergreen)

 75. Frozen land in the polar zone is most often found in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (taiga or tundra)

 76. A rise in global temperatures due to an increase in carbon dioxide is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (global warming or the greenhouse effect)

 77. The day-to-day changes in temperature and precipitation define an area's \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (weather or climate)

 78. The equator and the lines running parallel to it are lines of\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (latitude or elevation)

 79. Large grazing animals, including bison, live in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ grasslands of North America. (tropical or temperate)

 80. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ have brightly colored leaves in autumn. (Deciduous trees or Evergreens)

 81. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ blow mainly from one direction and affect the amount of precipitation a region receives. (Surface currents or Prevailing winds)

 82. When warm air cools, it loses the ability to hold water vapor, which results in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 83. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the height of surface landforms above sea level.

 84. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ currents are streamlike movements of water that occur at or near the surface of the ocean.

 85. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a large region characterized by a specific type of climate and the plants and animals that live there.

 86. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ zone is the warm zone located around the equator.

 87. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ zone is the climate zone between the Tropics and the polar zone.

 88. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ zone includes the northernmost and southernmost climate zones.

 89. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are trees that keep their leaves year-round.

 90. A permanently frozen layer of soil beneath thawed soil is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 91. Evergreen needle-leaved trees, such as pine, spruce, and fir trees, are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 92. Small regions with unique climatic characteristics are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 93. A period in which ice collects in high latitudes and moves toward lower latitudes is called a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 94. The period during an ice age in which enormous sheets of ice advance, getting bigger and covering a large area is called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ period.

 95. The period during an ice age in which ice begins to melt is called a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ period.

 96. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ theory suggests that changes in the Earth's orbit and in the tilt of the Earth's axis cause ice ages.

 97. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the Earth's natural heating process, in which gases in the atmosphere trap heat.

 98. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the process of clearing forests.

**Short Answer**

 99. What is the difference between weather and climate?

 100. How do mountains affect climate?

 101. Describe how air temperature is affected by ocean currents.

 102. How would seasons be different if the Earth did not tilt on its axis?

 103. What are the soil characteristics of a tropical rain forest?

 104. In what way has savanna vegetation adapted to fire?

 105. How do each of the tropical biomes differ?

 106. Describe how tropical deserts and temperate deserts differ.

 107. List and describe the three major climate zones.

 108. Rank each biome according to how suitable it would be for growing crops. Explain your reasoning.

 109. a. How has the Earth's climate changed over time?

b. What might have caused these changes?

 110. Explain how the greenhouse effect warms the Earth.

 111. What are two ways that humans contribute to the increase in carbon dioxide levels in the atmosphere?

 112. How will the warming of the Earth affect agriculture in different parts of the world?

 113. Why are the poles colder than the equator?

 114. Is precipitation more likely to occur when the prevailing winds are formed from warm air or when they are formed from cold air?

 115. Why are temperatures milder in Iceland than in Greenland?

 116. Explain why the climate differs on opposite sides of a mountain range.

 117. Can a climate zone contain more than one biome?

 118. What is a microclimate?

 119. Why does the sea level fall during glacial periods?

 120. How might a major volcanic eruption have brought about an ice age?

 121. How might global warming affect coastal areas?

 122. Why do higher latitudes receive less solar radiation than lower latitudes?

 123. How does wind influence precipitation patterns?

 124. Give an example of a microclimate. What causes the unique temperature and precipitation characteristics of this area?

 125. How have desert plants and animals adapted to this biome?

 126. How are tundra and deserts similar?

 127. Use the following terms to create a concept map: *climate, global warming, deforestation, greenhouse effect, flooding.*

 128. Explain how ocean surface currents are responsible for milder climates.

 129. In your own words, explain how a change in the Earth's orbit can affect the Earth's climates as proposed by Milutin Milankovitch.

 130. Explain why the climate differs drastically on each side of the Rocky Mountains.

 131. What are some steps you and your family can take to reduce the amount of carbon dioxide that is released into the atmosphere?

 132. If the air temperature near the shore of a lake measures 24ºC, and if the temperature increases by 0.05ºC every 10 m traveled away from the lake, what would the air temperature be 1 km from the lake?

The following illustration shows Earth's orbit around the sun.



 133. At which position **1**, **2**, **3**, or **4** is it spring in the Southern Hemisphere?

 134. At which position does the South Pole receive almost 24 hours of daylight?

 135. Explain what is happening in each climate zone in both the Northern Hemisphere and Southern Hemisphere at position 4.

 136. What are the three major climate zones?

 137. The British Isles are approximately 2º farther north than Maine, yet Maine has a colder climate. Explain why the temperatures in the British Isles might be warmer than expected.

 138. Death Valley has an average annual temperature of about 24ºC (76ºF), but its climate is not pleasant. Explain how this average can be misleading.

 139. The sun rose at 6:57 A.M. and set at 5:39 P.M. one day in a coastal city. How many hours and minutes of daylight did the city have that day? Show your work.

Below are climatograms of two different areas.



 140. Identify the biome in which each climate can be found.

 141. How can you tell if the region represented in a climatogram is in the Northern Hemisphere, the Southern Hemisphere, or near the equator? Use the climatograms above as examples.

 142. Use the following terms to complete the concept map below: *carbon dioxide, polar regions, greenhouse gases, interglacial periods, burning fossil fuels, glacial periods, deforestation.*

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